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(54) Title: METHODS AND COMPOSITIONS FOR IN VITRO SYNTHESIS OF BIOLOGICAL MACROMOLECULES IN A CELL-FREE SYSTEM ENRICHED WITH ATP-SULFURYLASE

**(57) Abstract:** The present invention provides methods and composition for enhancing in vitro synthesis of biological macromolecules in a cell-free system where ATP is required as a primary energy source, wherein said cell-free system is enriched with ATP-sulfurylase. The invention relates also to as cell-free systems and cell-free extracts enriched with ATP-sulfurylase for enhancing in vitro synthesis of any biological macromolecules.

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